

while unsaddling his horse in the barn. His clothes were completely torn from his body, his watch-chain melted, and his face and body badly mangled. The horse was killed and one end of the barn torn out. Clinton Valley, Ohio, 20th, boy instantly killed while riding horseback. His body bore no marks, but the horse on which he rode was torn to pieces. Jamaica, N. Y., 23d, a young girl while seated under a tree was struck and knocked a distance of 10 feet, but not seriously injured; three other persons near by were fatally injured. Detroit, Mich., 16th, house struck, blackening the walls and tearing off picture moldings. At the Marine Hospital a forty-foot flag-staff situated on the roof was shattered to within 20 feet of the base, where the electric current was conducted down the iron braces, making two small sharply cut holes in the corrugated iron roof. Ohio, 16th, the most destructive electric storm ever known was experienced throughout central and north-eastern portion of the state. Dubuque, Iowa, 18th, a man while seeking shelter in a ice-house was struck, the lightning scorching one of his legs severely and tearing off his shoe and stocking. A brakeman leading two dogs within the yard of the Illinois Central Railroad Company had both of them killed while he escaped the slightest injury. At the Norwegian Plow Works the lightning made such a terrific display as to drive all of the employees out of the buildings. At the Illinois Central Freight Office, balls of fire were constantly shooting from the telephones. Wauwatosa, Milwaukee Co., Wis., 16th, during a light rain the lightning descended the chimney of a house, killing one of the occupants. The room in which the person was killed had the plastering torn from the walls; a heavy bedstead was jerked into the middle of the room, shattered into long pieces and set on fire. A stove was smashed to atoms, and crocks, pins and other wares were broken and twisted into all kinds of shapes. The other rooms of the house were not in the least affected, and six children sleeping in the main part were undisturbed.

Atmospheric Electricity Interfering with Telegraphic Communication.—Ft. Sill, 6th, 7th, 9th; Jacksboro', 7th, 9th; Stockton, 1st, 5th, 6th, 8th, 26th, 27th; Decatur, 9th.

Auroras.—There were no unusually brilliant displays during the month, and no continuous observations on a single date embracing a considerable extent of territory. The following stations reported on various dates: Portland, Me., 5th, 10.30 p. m.; Burlington, Vt., 5th, 9.30 p. m.; Woodstock, Vt., 5th, 6th; Springfield, Mass., 29th, 9 p. m.; Ithaca, N. Y., 4th, early part of evening; Rochester, 4th, 9 p. m.; Detroit, 6th, 1.30 a. m.; Alpena, 9th, 8 p. m.; New Corydon, Ind., 17th, 10 p. m., small extension; Marquette, 5th, 9.15 a. m., 7th, early morning; Dubuque, 13th, 8.40 to 9.22 p. m., 20th, 8.30 to 9.11 p. m., 25th, 8.40 p. m.; St. Vincent, 30th, 12.45 a. m.; Clear Creek, Nebr., 16th, 17th, 21st, very faint.

Zodiacal Light.—Cleveland, 28th; Nashville, 14th to 19th, 22d to 24th, 27th, 29th; New Haven, 15th; Monticello, Ia., 3d, 17th.

OPTICAL PHENOMENA.

Lunar halos have been observed in the various districts on the following dates: New England, 9th, 11th; Middle Atlantic states, 2d, 7th to 10th, 15th; South Atlantic states, 1st, 5th, 7th to 9th; East Gulf states, 3d, 6th, 8th to 10th; Texas, 1st to 8th, 10th, 24th; Ohio valley and Tennessee, 6th to 13th, 16th, 18th, 19th, 24th; Lower Lake region, 11th, 24th, 30th; Upper Lake region, 4th, 6th to 9th, 15th, 18th, 19th, 20th, 21st; Upper Mississippi valley, 4th, 9th, 10th, 11th, 14th; Missouri valley, 3d, 16th; Northern Plateau, 6th, 13th; Middle Plateau, 10th, 11th; Southern Plateau, 5th, 9th; Middle Pacific coast region, 9th, 11th.

Solar halos have been observed in the various districts on the following dates: New England, 3d, 7th, 9th, 10th, 14th, 16th, 19th, 24th, 26th; Middle Atlantic states, 25th; South Atlantic states, 2d; Ohio valley and Tennessee, 1st, 10th, 12th, 13th, 15th, 16th, 18th, 19th, 21st to 30th; Lower Lake region, 6th, 25th; Upper Lake region, 6th to 9th, 11th, 15th, 20th, 29th; Upper Mississippi valley, 2d, 5th, 9th, 17th, 18th, 21st to 24th, 28th, 29th; Missouri valley, 5th; Eastern Slope, 9th, 10th, 20th, 25th; Texas, 5th; Northern Plateau, 2d, 6th, 14th, 16th, 10th, 22d, 24th, 25th; North Pacific coast region, 1st, 2d, 16th, 23d, 25th, 29th; Middle Pacific coast region, 2d, 5th, 11th to 14th, 23d, 25th.

Polar Bands.—Portland, Or., 16th, 18th, 29th; Rio Vista, Cal., 2d, 19th, 27th; New Corydon, Ind., 11th; Guttenburg, Ia., 5th; Fayette, Miss., 26th; Freehold, N. J., 5th, 19th.

Mirage.—Indianola, 23d, 24th; Cape May, 28th, appeared in the southern horizon from 3 to 6 p. m.

MISCELLANEOUS PHENOMENA.

Meteors.—Umatilla, 2d. Boise City, 17th, 21st. Ft. Missoula, 24th. Ft. Apache, 20th. Bismarck, 23d. St. Vincent, 30th; very brilliant, starting from near the head of "Hercules" and fell slowly to the earth; was of a greenish color, and its brightness so great that the whole sky seemed darkened when it disappeared. Denison, 23d, 26th. Decatur, 4th. Corsicana, 16th, 19th: that of latter date was very brilliant; appeared about 70° above horizon and pursued a northwesterly course, its path being about 25° in length; it left a bright trail, lasting several seconds. Mobile, 27th. Davenport, 2d, 27th. Cairo, 24th. Milwaukee, 21st; brilliant; from southeasterly part of heavens; it left a long luminous track in its course toward the pointers in "Ursa Major." Cleveland, 24th, 29th. Detroit, 12th; several observed. Ocean City, Md., 25th. Bangor, Me., 7th, 10 p. m.; large; seemed to fall directly to the earth. Mt. Wash-